

Canadian Solar Buildings Conference

31st Annual Conference of the Solar
Energy Society of Canada
and
1st Canadian Solar Buildings Research
Network Conference

Montréal, August 20 - 24, 2006



Concordia University is pleased to host the joint 31st SESCO and 1st Solar Buildings Research Network (SBRN) conference in Montreal.

The conference will build on the previous SESCO meetings and will introduce the research activities of the newly established Solar Buildings Research Network.

**SOLAR BUILDINGS
RESEARCH NETWORK**



**RÉSEAU DE RECHERCHE SUR
LES BÂTIMENTS SOLAIRES**



solar energy
society of canada inc.

www.solarbuildings.ca

Solar Buildings Conference

Buildings account for about 30% of Canada's energy consumption, about 50% of its electricity consumption and roughly 28% of its greenhouse gas (GHG) emissions. The available solar energy incident on the building envelope far exceeds the building energy needs, particularly when solar energy utilization systems and energy efficiency measures are optimally integrated. The energy consumption and GHG emissions, which are associated with heating, cooling and lighting buildings, have the potential to be substantially reduced if the incident solar energy on the façades or roofs of buildings is utilized.

This 31st Annual Conference of the Solar Energy Society of Canada is held jointly with the 1st Conference of the newly formed Solar Buildings Research Network that brings together top researchers from 10 Canadian Universities to develop the solar-optimized building of the 21st century.

This conference will be a cornerstone of Canadian efforts to promote innovative research and development in solar energy utilization. It will foster a culture of excellence in an area that significantly affects two major sectors of the Canadian economy - energy and construction.

Topics

The conference addresses topics related to solar energy and buildings, innovative technologies, experimental studies, simulation applications, design tools and methods, case studies and practical applications. The following is the list of topic areas addressed:

Topic 1: Photovoltaic Systems, Applications and Manufacturing

- 1.1. Photovoltaic Applications
- 1.2. Hybrid Systems Applications
- 1.3. Photovoltaic Cell Materials and Manufacturing
- 1.4. Balance-of-System Components and Manufacturing

Topic 2: Solar Thermal Systems

- 2.1. Solar Thermal Applications
- 2.2. Hybrid Systems Applications
- 2.3. Solar Collector Technologies
- 2.4. Thermal Storage

Topic 3: Integration of Solar Energy Systems into Buildings

- 3.1. Passive Solar Design
- 3.2. Building Integrated Photovoltaics
- 3.3. Building Integrated Solar Thermal
- 3.4. Daylighting and Fenestration

Topic 4: Solar Electricity Generation in Buildings

- 4.1. Power Conversion Systems for Buildings
- 4.2. System Integration for PV Systems in Buildings

Topic 5: Design Tools, Policy, and Regulatory Issues

- 5.1. Simulation Tools for Buildings
- 5.3. Solar Resource Analysis
- 5.4. Policy, Marketing, Legislation, Regulatory Issues

Topic 6: Solar Energy Education and Human Resources

- 6.1. Solar energy education: courses, workshops and seminars
- 6.2. Technology transfer issues



Concordia Solar House

Solar Buildings Research Network

The Solar Buildings Research Network (SBRN) brings together top Canadian researchers in solar energy and buildings from 10 Canadian universities, with government and industry researchers to develop the solar-optimized homes and commercial buildings of the future.

The vision of SBRN is to develop solar-optimized buildings as integrated advanced technological systems that will approach, on the average, the zero-energy target and be cost effective.

Solar Energy Society of Canada Inc.

Established in 1974, the Solar Energy Society of Canada Inc. (SESCI) operates as a non-profit organization, with registered charitable status. SESCO is a national organization with chapters or affiliates across Canada (www.sesci.ca).

SESCI facilitates the exchange of up-to-date scientific and technical information and provides a resource to various sectors involving energy utilization and related technology.

The mission of SESCO is to advance the awareness, understanding and use of solar energy in Canada.

Canadian Solar Buildings Conference

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Program & conference information

In addition to technical sessions, the conference will be complemented by a number of special events such as a trade show, specialized workshops and public meetings.

Details on these, as well as the conference program, will be posted on the Solar Buildings Network website as they become available.

Registration

- Early bird: up to June 15: \$375 / \$75 (students)
- After June 15: \$425 / \$125 (students)

Registration will be done online at
www.solarbuildings.ca Starting May 1, 2006

Accommodation

Rooms have been reserved for the conference at two ideally located hotels:

- Hotel Maritime: www.hotelmaritime.com;
Tel. 1 800 363 6255
- Le Nouvel Hotel: www.lenouvelhotel.com;
Tel . 1 800 363-6063

In order to ensure availability of the special price of \$105.00, please reserve before July 4, 2006.

A limited number of student accommodations has been reserved at:

- La Maison du prêt d'honneur : mph.sat.qc.ca
Tel. 1 514 982-3420

In order to ensure availability of the rooms at \$48.00, please reserve as soon as possible and before August 1, 2006

Venue

Montréal is truly an experience: old world charm, French joie de vivre and a modern style all of its own. It is a vibrant multicultural city with many international festivals and plenty of opportunities to dine and shop. The international Trudeau airport is located 20 min from downtown, where Concordia University is located. Relevant information and a visitor's guide can be found at: www.tourisme-montreal.org

Scientific committee

- A. Athienitis, Concordia University
- I. Beausoleil-Morrison, NRCan (CETC-O)
- M. Bernier, École Polytechnique de Montréal
- L. Chang, University of New Brunswick
- R. Charron, Concordia University
- M. Collins, University of Waterloo
- A. Fung, Ryerson University
- S. Harrison, Queens University
- T. Kesik, University of Toronto
- A. Laouadi, IRC-CNRC
- J. Love, University of Calgary
- B. Marsan, UQAM
- A. Mohamad, University of Calgary
- D. Naylor, Ryerson University
- P. Oosthuizen, Queens University
- Y. Poissant, NRCan (CETC-V)
- D. Prasad, University of New South Wales
- M. Santamouris, University of Athens
- L. Stamenic, BCIT
- D. Thevenard, Numerical Logics
- A. Tzempelikos, Concordia University
- R. Zmeureanu, Concordia University

Organizing committee

- A. Athienitis, SBRN, Concordia University
- R. Charron, SESCO
- P. Karava, Concordia University
- M. Stylianou, SBRN
- A. Tzempelikos, SBRN, Concordia University